

April 30, 2009

Municipal Permit Comments
Water Quality Program
Washington State Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

Subject Snohomish County Comments on Proposed Modifications to
 the NPDES Phase 1 Municipal Stormwater Permit

To Whom It May Concern,

Thank you for the opportunity to comment on the proposed modifications to the NPDES Phase 1 municipal stormwater permit issued on March 18, 2009.

The following pages contain detailed comments on Ecology's proposed modifications to the permit and its appendices.

Ecology also solicited "proposals that would reduce costs of permit compliance, including, but not limited to, extending interim deadlines in the permit." This letter contains such proposals.

If you would like to discuss our comments further, please contact Bill Leif at (425) 388-3148.

Sincerely,

Steven E. Thomsen, P.E. Director

cc:	Brian D. Parry	Executive Director
	Craig Ladiser	Director, Dept. of Planning and Development Services
	Owen Carter, P.E.	Snohomish County Engineer
	Bill Leif, P.E.	Surface Water Management Division

A) COMMENTS ON MODIFICATIONS PROPOSED BY ECOLOGY

COMMENT # 1

S4 - Compliance with Standards

Revise the proposed modifications to Section S.4.F.2 as follows:

In the event that Ecology determines, based on a notification provided under S4.F.1. or through any other means, that a discharge from a municipal separate storm sewer owned or operated by the Permittee is causing or contributing to a violation of Water Quality Standards in a receiving water, and the violation is not already being addressed by a Total Maximum Daily Load or other water quality cleanup plan, Ecology will notify the Permittee in writing that: an adaptive management response outlined in S4.F.3. below is required, unless Ecology also determines that:

- (a) the violation of Water Quality Standards is already being addressed by a Total Maximum Daily Load or other enforceable water quality cleanup plan; ~~or~~
- (b) Ecology concludes the violation will be eliminated through implementation of other permit requirements;
- (c) the violation is being caused by a discharge regulated by an NPDES permit or waste discharge permit administered by Ecology; or
- (d) the violation is caused by a discharge from a facility that is required to operate under an NPDES permit or other state waste discharge permit administered by Ecology but such permit has not been obtained.

Justification: This change would help clarify which agency is responsible for each response action and may clarify and simplify reporting procedures under the municipal permit.

COMMENT # 2

S5.C.5 – Controlling Runoff from New Development, Redevelopment, and Construction Sites

Do not modify the existing language in paragraph S5.C.5.b.iii of the permit.

Justification: The proposed modification is confusing, contradictory, and premature. The proposed new paragraph S5.C.5.b.iii.2 requires Phase 1 permittees to require Low Impact Development (LID) measures "where feasible) but does not define LID or "feasible." As written, we would not know how to comply with this paragraph due to these ambiguities. However, Ecology attaches a footnote to this paragraph stating that

Ecology will "initiate a process to define the scope of LID techniques to be considered, criteria for determining the feasibility of LID techniques, and a LID performance standard." The footnote states that after this process is complete, Ecology will incorporate the results into the permit through a permit modification. In other words, Ecology's apparent intent is to require participation in a committee process, after which Ecology will further modify the permit.

Snohomish County fully supports Ecology's proposal to initiate a multi-stakeholder process to determine the scope, criteria, and performance standards for LID vis a vis NPDES stormwater permits. We would be like to participate in this process. However, we think that the proposed modification as written is unworkable and should be deleted.

COMMENT # 3

S5C6 – Structural Stormwater Controls

Add the following language to the end of the new sentence inserted as bullet 3 of S5.C.6.b.ii:

...included in the Permittee's Structural Stormwater Control Program.

Justification: Clarifies intent and corrects typographical error.

COMMENT # 4

Special Condition S8 - Monitoring

Amend the first sentence of proposed modification to S8.D.2.a as follows:

Each stormwater monitoring site shall be sampled according to the following frequency unless good faith efforts ~~with~~ using good professional practice by the Permittee do not result in collecting a successful sample for the full number of storms:

Justification: Clarifies intent.

COMMENT # 5

Special Condition S8 - Monitoring

Revise the proposed new second paragraph in Section S8.D.2.d.ii as follows:

Terminated organisms must be preserved for up to at least six months. ~~Within sixty (60) days after final validation of the data, the Permittee shall compare the chemical analysis results for the same sample event to a library of toxicity test results compiled by Ecology and identified for this purpose, using good faith efforts to determine if the presence of an analyzed contaminant is within a range reported in the literature that may adversely affect fish embryos and if so to review the source literature.~~ Within five (5) days after final validation of data, the Permittee shall report the results to Ecology. Ecology will compare the chemical analysis results to a library of toxicity test results compiled by Ecology. Ecology will notify the permittee if the presence of an analyzed contaminant is within a range reported in the literature that may adversely affect fish embryos.

If a possible chemical contaminant(s) of concern is determined by the library comparison and literature review, the Permittee must prepare and submit a report summarizing ~~the toxicity and chemical analysis results, the library comparison, a review of relevant sources of literature from Ecology's library, the possible chemical contaminant(s) of concern, and an explanation of how the Permittee's stormwater management actions are expected to reduce stormwater toxicity for the contaminant(s) of concern.~~ This report will be submitted to Ecology within one hundred twenty (120) days after final validation of the toxicity and chemistry data receiving notification from Ecology. In addition, the report will be attached as an appendix to the following year's annual stormwater monitoring report.

Justification: Centralizing the review of toxicity test results with Ecology will reduce costs incurred by individual permittees in hiring qualified professionals with expertise in toxicity and impacts to fish embryos. A centralized review would eliminate differing levels of analyses and data interpretations among the permittees resulting in consistency and comparability of results across the region.

Also, as currently written, Ecology's proposed first sentence requires terminated organisms to be preserved for exactly six months, no more or less. The first sentence proposed by Snohomish County is probably more in line with Ecology's intent.

COMMENT # 6

Special Condition S8 - Monitoring

Revise Section S8.H.2 as follows:

If, during the preceding water year, the Permittee monitoreds any pollutant more frequently at monitoring stations associated with the monitoring programs described in Section S8.D., S8.E. and/or S8.F. ~~during the proceeding water year, then~~ the results of that monitoring shall be included in the annual monitoring report.

Justification: Replaces the word “proceeding” with the word “preceding.” Corrects typographical errors, and improves readability of the language.

COMMENT # 7

General Condition G3 - Notification of Spill

Revise the proposed modified language to Section G3.A. as follows:

Take appropriate action to correct or minimize the threat to human health, welfare and/or the environment, ~~and,~~

Justification: This construction matches the rest of the section.

COMMENT # 8

General Condition G20 - Noncompliance Notification

Revise the proposed modified language in the first sentence of General Condition G20 as follows:

In the event it is unable to comply with any of the terms ~~and/or~~ conditions of this permit, the Permittee must:

Justification: Clarifies intent.

COMMENT # 9

General Condition G20 - Noncompliance Notification

Comment: G20.A.1 should be amended by replacing the words “the reference(s)” with the words “references to the applicable sections of this permit.” The revised language would read as follows:

A description of the non-compliance, including ~~the reference(s)~~ to the applicable sections of this permit.

Justification: Clarifies requirements.

COMMENT # 10

General Condition G20 - Noncompliance Notification

The proposed modification to G20.A.3 should be amended by adding a period at the end of the sentence. The revised language would read as follows:

Steps taken or planned to reduce, eliminate, or prevent reoccurrence of the non-compliance.

Justification: Corrects typographical error.

COMMENT # 11

Appendix A - Minimum Technical Requirements, Section 4.2

We support the proposed modification to the second paragraph of Section 4.2 pertaining to Minimum Requirement #2 - Construction Stormwater Pollution Prevention Plans. This modification would allow municipal permittees to develop abbreviated SWPPP formats for sites less than one acre, regardless of whether the site is part of a larger common plan of development.

COMMENT # 12

Appendix A - Minimum Technical Requirements, Section 4.2

We support the proposed modification to Subsection 4.2.12. This modification would limit the requirement to have a Certified Erosion and Sediment Control Lead on site or on call at all times to sites that are one acre or greater.

Justification: The requirement as written would apply to all projects to which Minimum Requirement 2 applies, including very small construction projects. Snohomish County's revised codes will require a SWPPP for a project over 200 square feet in an urban growth area, and a project over 400 square feet outside urban growth areas. However, imposing the CESCL requirement on all projects places an inordinate burden on small project proponents.

Also, the modified requirement is in accord with the requirements of the NPDES construction permit.

B) ADDITIONAL MODIFICATIONS PROPOSED BY SNOHOMISH COUNTY

COMMENT # 13

Section S7.C.7 - Source Control Program For Existing Development

Revise the first bullet of Section S7.C.7.b.iii to read as follows:

All identified ~~sites with a~~ sites-businesses ~~address~~ shall be provided, by mail, telephone, or in person, information about activities that may generate pollutants and the source control requirements applicable to those activities. This information may be provided all at one time or spread out over the last three years of the permit term to allow for some tailoring and distribution of the information during site inspections. Businesses may self-certify compliance with the source control requirements at the discretion of the Permittee. The Permittee shall inspect 20% of these ~~sites~~ sites-businesses annually to assure BMP effectiveness and compliance with source control requirements. The Permittee may select which ~~sites~~ sites-businesses to inspect each year and is not required to inspect 100% of sites over a 5-year period. Sites may be prioritized for inspection based on their land use category, potential for pollution generation, proximity to receiving waters, or to address an identified pollution problem within a specific geographic area or sub-basin.

Justification: The change specifies businesses instead of sites. A site may contain several businesses. The revised text corrects the ambiguity.

COMMENT # 14

Section S7.C.7 - Source Control Program For Existing Development

Change the third bullet of Section S5.C.7.b.iv to read as follows:

Each Permittee shall maintain records, including documentation of each site visit, inspection reports, warning letters, notices of violation, and other enforcement records, demonstrating an effort to bring facilities in to compliance. Each Permittee shall also maintain records of sites that are not inspected because the property or business owner, or person responsible denies entry.

Justification: In most cases the business owner or their person responsible will be the initial contact and will grant or deny permission for the inspection.

COMMENT # 15

S5.C.8 - Illicit Connections and Illicit Discharges Detection and Elimination

Revise section S5.C.8.b.vi.2 to read as follows:

Each County covered under this permit shall prioritize outfalls and their associated upstream conveyance systems within 3 priority subbasins such that 25 percent of the known outfalls and associated upstream conveyance systems are screened in urban/higher density rural sub-basins for screening and shall complete field screening for at least half of the conveyance systems in these areas no later than 4 years from the effective date of this permit. In addition, Counties shall ~~complete field screening~~ screen 25 percent of known outfalls and associated upstream conveyance systems in at least 1 rural sub-basin no later than 4 years from the effective date of this permit.

Outfalls and their associated upstream conveyance systems are considered screened when a field visit to the most downstream outfall and appropriate follow up through the upstream conveyance system has occurred.

Priority sub-basins may be chosen based upon those waterbodies having established TMDLs as identified in Appendix 2 of the permit, attributes such as land use and associated commercial/industrial activities, historical water quality complaints and other relevant data.

Justification: Ecology requires Counties to prioritize outfalls and conveyances in urban/higher-density rural subbasins, and complete field screening for at least half of the conveyance systems in these areas no later than 4 years from the effective date of the permit. The permit requirement is vague, and has been found through GIS analysis and field experience to prioritize field screening in areas subject to annexation and which in which there is a lower incidence of illicit connections and discharges.

Using GIS, Snohomish County has identified four urban/higher-density rural subbasins and found they are largely residential in nature and partially located within areas likely to be annexed in 2010 and 2011. It is the experience of Snohomish County that a higher percentage of illicit connections and discharges are found per outfall screened within commercial and industrial land uses. Screening outfalls in commercial and industrial areas is a more cost-effective method of reducing pollution to surface waters. For these reasons, Snohomish County proposes allowing a more flexible method of choosing priority areas for IDDE screening.

It is not meaningful or a wise use of public resources to require that 50% of conveyance systems be screened. A single conveyance system such as piped drainage network or open ditch system may continue for many miles. Without providing language which acknowledges a link between upstream conveyance systems and associated outfalls, Counties are required to screen 50% of all conveyance systems even if screening the most downstream outfall or subsequent outfalls upstream indicates the system is free of flow or signs of illicit connections and discharges. We assume this was not Ecology's intent.

Using existing Phase 1 NPDES permit language and protocols in 2008, Snohomish County screened over 260 known outfalls within the urban/higher-density rural subbasins, without finding one illicit discharge or connection. Labor, sample analysis, and database modification costs exceeded \$60,000 for the 2008 effort. The resulting cost per illicit connection or discharge identified through current permit IDDE requirements is extremely high.

Snohomish County strongly encourages Ecology to allow Counties to identify priority subbasins, and relax the percentage of outfalls that must be screened, such that limited resources may be directed to Source Control Programs which have and will continue to be a more cost-effective way to discover and remove illicit connections and or discharges.

COMMENT # 16

Special Condition S5.C.9 - Operation and Maintenance Program

Revise Section S5.C.9.b.i.2 to read as follows:

(2) Unless there are circumstances beyond the Permittee's control, when an inspection identifies an ~~exceedence~~exceedance of the maintenance standard, maintenance and repairs shall be performed in accordance with the standards established in accordance with S5.C.9.b.i, and in accordance with one of the following schedules:

(Schedule A)

- o ~~W~~within 1 year for wet pool facilities and retention/detention ponds;
- o ~~W~~within 6 months for typical maintenance;
- o ~~W~~within 9 months for maintenance requiring re-vegetation;
- and
- o ~~W~~within 2 years for maintenance that requires capital construction of less than \$25,000; OR

(Schedule B)

- o within 30 days of inspection date for a flow control structure associated with a detention or retention facility;
- o within 1 year of inspection date for maintenance and repairs for which the total estimated cost is less than \$25,000; and
- o within 2 years of inspection date for maintenance and repairs for which the total estimated cost is \$25,000 or more.

Justification: The term "maintenance and repairs" is recommended to eliminate potential confusion about whether repair of an object is excluded from the requirements. Similarly, the term "capital construction" is not included in the recommended additional language because it implies an artificial and unnecessary distinction between maintenance and capital construction or perhaps an undefined type of "non-capital construction." The adopted maintenance standards set forth operating conditions that must be restored by the required actions in the required time frame by whatever means is necessary or most efficient.

The alternate schedule (Schedule B) proposed by Snohomish County is more practical to achieve and in some cases more stringent than the original schedule (Schedule A). The first criterion for Schedule B shortens the time in which maintenance is required for a detention/retention control structure that is not functioning properly and needs maintenance. It is important to reduce this response time to avoid the scenario in which a detention/retention facility does not detain any stormwater for six months and therefore causes downstream impacts, such as flooding, erosion, aquatic habitat degradation, etc.

The second criterion allows for up to one year to perform normal maintenance activities that cost less than \$25,000. In many cases, this is more practical to achieve than the 6-month requirement for "typical" maintenance in the original schedule. For example, if a detention pond is inspected in September and found to have significant vegetation growth or sediment deposits, it will take less time and reduce maintenance costs if the maintenance is performed the following summer when water levels in the pond will be lower. Under the current 6-month requirement, the maintenance would need to be performed during the fall or winter months when water levels will be higher, which would require more time and cost to pump out the pond so that the maintenance can be performed.

The third criterion is also more practical since it allows up to two years to repair or maintain facilities for which such costs exceed \$25,000. For those facilities repaired or maintained by the County, this allows more time to budget for these higher expenses and helps to reduce the chance that the repair / maintenance budget in a given year would be exceeded. For those facilities maintained by property owners, this likewise allows the owner more time to plan and save for this high of an expense.

Note that Snohomish County does not propose removal of the existing permit requirement for maintenance, since other Phase 1 municipalities may have structured their codes and maintenance programs around the existing permit language. Instead, we propose adding the language above as an alternative path to permit compliance.

COMMENT # 17

Special Condition S5.C.9 - Operation and Maintenance Program

Revise paragraphs (2) through (5) of Section S5.C.9.b.ii as follows:

- (2) No later than 18 months after the effective date of this permit, each Permittee shall develop and implement an initial inspection schedule for all known, permanent stormwater treatment and flow control facilities (other than catch basins) regulated by the Permittee to inspect ~~each facility~~ 50 percent of these facilities each facility at least once during the term of this permit to enforce compliance with adopted maintenance standards as needed based on the inspection. The inspection program is limited to facilities to which the Permittee can legally gain access, provided the Permittee shall seek access to the types of stormwater treatment and flow control facilities listed in the 2005 *Stormwater Management Manual for Western Washington*.
- (3) No later than 4 years after the effective date of this permit, each Permittee shall develop an on-going inspection schedule to ~~annually~~ annually inspect at least once every other year all stormwater treatment and flow control facilities

Proposed Modifications to NPDES Phase Municipal Stormwater Permit
Snohomish County Comments
April 30, 2009

(other than catch basins) regulated by the Permittee. The biannual inspection requirement may be reduced based on maintenance records.

Reducing the inspection frequency to less frequently than biannually shall be based on maintenance records ~~of double of double~~ that at least equal the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 *Certification and Signature*.

- (4) No later than 2 years after the effective date of this permit each Permittee shall manage maintenance activities to inspect all new permanent stormwater treatment and flow control facilities, including catch basins, in new residential developments every ~~6-12~~ months during the period of heaviest construction to identify maintenance needs and enforce compliance with maintenance standards as needed.
- (5) Compliance with the inspection requirements of S5.C.9.b.ii.(2), (3), and (4), above, shall be determined by the presence of an established inspection program designed to inspect all sites, and achieving inspection of ~~95%~~ 90% of all sites.

Justification: The above proposed changes are intended to reduce the frequency in which inspections and maintenance would be required for drainage facilities that are regulated, owned, or operated by Phase 1 jurisdictions. As described below, these changes would help to reduce the financial strain caused by substantially higher inspection and maintenance costs needed for permit compliance without causing an increase in surface water impacts.

The current standards have caused a significant increase in costs to both Phase 1 jurisdictions and property owners to inspect and maintain these stormwater treatment and flow control facilities. Unfortunately, these increased costs have occurred at a time when most jurisdictions throughout the state are facing substantially declining revenues. This combination of factors has caused many jurisdictions, including Snohomish County, to make painful reductions in staff and/or services. As a result, the proposed permit changes would help limit the substantial increase in maintenance costs and the added financial strain that has affected jurisdictions throughout our region.

While the proposed changes would substantially reduce maintenance costs, it is believed that they would not cause significant surface water impacts or significantly affect the desired outcome for this permit. Although the frequency of inspections and maintenance would be reduced, the standards used to inspect and maintain these facilities would not be changed and no facilities governed by the permit would be eliminated from regular inspection and maintenance. In Snohomish County, this revised frequency would still represent a substantial increase in the frequency in which these facilities have historically been maintained. In addition, these changes should be consistent with sections S4.C and

S4.D of the permit, where the terms “practicable” and “reasonable” should include consideration for the economic challenges being faced throughout the region.

COMMENT # 18

Special Condition S5.C.9 - Operation and Maintenance Program

Revise paragraphs (1) and (3) of Section S5.C.9.b.iii as follows:

- (1) No later than 24 months after the effective date of this permit each Permittee shall begin implementing a program to ~~annually~~ annually inspect at least once every other year all permanent stormwater treatment and flow control facilities (other than catch basins) owned or operated by the Permittee, and implement appropriate maintenance action in accordance with adopted maintenance standards. The biannual inspection requirement may be reduced based on inspection records.

Changing the inspection frequency to less frequently than biannually shall be based on maintenance records of ~~double of double~~ that at least equal the length of time of the proposed inspection frequency. In the absence of maintenance records, the Permittee may substitute written statements to document a specific less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with *G19 Certification and Signature*.

- (3) Compliance with the inspection requirements of S5.C.9.b.iii(1) and (2) above, shall be determined by the presence of an established inspection program designed to inspect all sites, and achieving inspection of ~~95~~99~~90~~% of all sites.

Justification: See Comment # 17 on S5.C.9.b.ii.

COMMENT # 19

Special Condition S5C9 - Operation and Maintenance Program

Revise paragraphs (1) and (2) of Section S5.C.9.b.iv as follows:

- (1) No later than 24 months after the effective date of this permit each Permittee shall begin implementing a program to annually inspect at least once every other year catch basins and inlets owned or operated by the Permittee.
- Inspections may be conducted on a “circuit basis” whereby a sampling of catch basins and inlets within each circuit is inspected to identify maintenance needs. Include in the sampling an inspection of the catch basin immediately upstream of any system outfall. Clean all catch basins within a given circuit at one time if the

inspection sampling indicates cleaning is needed to comply with maintenance standards established under S5.C.9.b.i., above.

- As an alternative to inspecting catch basins on a “circuit basis,” the Permittee may inspect all catch basins, and clean only catch basins where cleaning is needed to comply with maintenance standards.
- (2) The biannual catch basin inspection schedule may be changed as appropriate to meet the maintenance standards based on maintenance records ~~of double of double that at least equal~~ the length of time of the proposed inspection frequency. In the absence of maintenance records for catch basins, the Permittee may substitute written statements to document a specific, less frequent inspection schedule. Written statements shall be based on actual inspection and maintenance experience and shall be certified in accordance with G19 *Certification and Signature*.

Justification: See Comment # 17 on S5.C.9.b.ii.

COMMENT # 20

Special Condition S8 - Monitoring

Revise Section S8.G.2.c as follows:

S8.G.2.c. Full implementation of the monitoring program shall begin no later than 2 years after the effective date of this permit. Toxicity testing under S8.D.2.d shall begin no later than 3 years after the effective date of this permit.

Justification: Postponing toxicity testing for one year will result in a cost savings in both staff time and lab analysis. It will also allow additional regional laboratories to become certified to conduct the test, increasing competition and driving down analytical costs.

COMMENT # 21

Appendix 2 - Total Maximum Daily Load (TMDL) Requirements

In the TMDL for Snohomish River Tributaries, 4th bullet in strategy B - Early Action Approach, clarify the difference between "begin implementation of BMPs" and "having BMPs in place."

Justification: The existing language is confusing.

COMMENT # 22

Appendix 2 - Total Maximum Daily Load (TMDL) Requirements

In the TMDL for Snohomish River Tributaries, revise the deadlines in the 7th and 8th bullets listed under Strategy B - Early Action Approach to stipulate that the Permittee shall complete initial development of the BPCP by March 31, 2011, and shall conduct public review of the BPCP, beginning on March 31, 2011.

Justification: The changes would align dates for BPCP development, public review and submittal to Ecology. In addition, the date change would provide one full year of monitoring data under the QAPP upon which to inform the BPCP. It would also add a legal start date for public review (March 31, 2011).

COMMENT # 23

Appendix 2 - Total Maximum Daily Load (TMDL) Requirements

In the TMDL for Snohomish River Tributaries, revise the second sentence of the 8th bullet to read:

- Permittees ~~that have already incorporated the Early Action BMP Plan into their Stormwater Management Plan during year two of the permit~~ may satisfy the public review requirement for the Bacterial Pollution Control Plan by incorporating it the Bacterial Pollution Control Plan into that plan the Stormwater Management Plan as a separate and distinct chapter or section and submitting it with the forth year annual report due to Ecology on March 31, 2011.

Justification: Since the recommended deadlines for development of the BPCP and further public review are both March 31, 2011, it is not feasible to satisfy the public review for the BPCP by incorporating it into Early Action BMP plan submitted during year two of the permit (2008-2009). Making the suggested date change aligns the BPCP submittal to Ecology with that of public review, which is an allowed option in the modified permit.

COMMENT # 24

Appendix 2 - Total Maximum Daily Load (TMDL) Requirements

In the TMDL for North Creek, 4th bullet in strategy B - Early Action Approach, clarify the difference between "begin implementation of BMPs" and "having BMPs in place."

Justification: The existing language is confusing.

COMMENT # 25

Appendix 2 - Total Maximum Daily Load (TMDL) Requirements

In the TMDL for North Creek, revise the deadlines in the 7th and 8th bullets listed under Strategy B - Early Action Approach to stipulate that the Permittee shall complete initial development of the BPCP by March 31, 2011, and shall conduct public review of the BPCP, beginning on March 31, 2011.

Justification: The changes would align dates for BPCP development, public review and submittal to Ecology. In addition, the date change would provide one full year of monitoring data under the QAPP upon which to inform the BPCP. It would also add a legal start date for public review (March 31, 2011).

COMMENT # 26

Appendix 2 - Total Maximum Daily Load (TMDL) Requirements

In the TMDL for North Creek, revise the second sentence of the 8th bullet to read:

- Permittees ~~that have already incorporated the Early Action BMP Plan into their Stormwater Management Plan during year two of the permit~~ may satisfy the public review requirement for the Bacterial Pollution Control Plan by incorporating it the Bacterial Pollution Control Plan into that plan the Stormwater Management Plan as a separate and distinct chapter or section and submitting it with the forth year annual report due to Ecology on March 31, 2011.

Justification: Since the recommended deadlines for development of the BPCP and further public review are both March 31, 2011, it is not feasible to satisfy the public review for the BPCP by incorporating it into Early Action BMP plan submitted during year two of the permit (2008-2009). Making the suggested date change aligns the BPCP

submittal to Ecology with that of public review, which is an allowed option in the modified permit.

COMMENT # 27

Appendix 2 - Total Maximum Daily Load (TMDL) Requirements

In the Swamp Creek TMDL, TMDL Public Involvement, 1st bullet, clarify which monitoring goal to achieve and maintain consistency among TMDL language.

Justification: Swamp Creek TMDL language in the public involvement and water quality monitoring sections relative to water quality monitoring goals implies different sample designs. Ecology should clarify which monitoring goal to achieve and maintain consistency among Swamp Creek TMDL language.

COMMENT # 28

Appendix 2 - Total Maximum Daily Load (TMDL) Requirements

In the Swamp Creek TMDL, TMDL Activity Documentation and Tracking, change “BPRP” to “BPCP.”

Justification: None necessary

COMMENT # 29

Appendix 2 - Total Maximum Daily Load (TMDL) Requirements

Delete 4th paragraph of the Water Quality Monitoring section in the Swamp Creek TMDL that begins "TMDL related monitoring shall begin..."

Justification: The requirement to begin Swamp Creek related TMDL monitoring within 180 days of permit issuance is not feasible as the deadline for QAPP submittal, under which monitoring occurs is 30 months after permit issuance.

COMMENT # 30

Section S.5.C.10 Education and Outreach Program

Revise as follows:

- a. The SWMP shall include an education and outreach program designed to change behaviors that contribute to adverse stormwater impacts. The program shall address a set of behaviors that are locally or regionally prioritized based on their significance to water quality (intensity), how frequently they occur (frequency), and the likelihood of achieving change (potential). The program shall target a set of audiences based on, and appropriate to, each selected behavior. Each Permittee shall develop its program locally or participate in a regional program. ~~program aimed at residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the Permittee. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. An education program may be developed locally or regionally~~

- b. Minimum Performance Measures:

- i. No later than 12 months after the effective date of this permit, each Permittee shall identify a set of specific targeted behaviors, the pollutants they address, and the specific audiences to be targeted in the education and outreach plan. The Permittee shall identify methods or strategies that will be used to promote and measure change in the selected behaviors.

Examples of targeted behaviors include but are not limited to fertilizer use, pesticide use, pet waste management, vehicle maintenance, residential car washing, septic system maintenance, tree retention, disposal of toxins, etc.

Examples of target audiences include but are not limited to urban landowners, rural landowners, homeowners, dog owners, gardeners, septic system owners, residents of multi-family dwellings, etc.

~~implement or participate in an education and outreach program that uses a variety of methods to target the audiences and topics listed below. The outreach program shall be designed to achieve measurable improvements in each target audience's understanding of the problem and what they can do to solve it.~~

~~(1) General Public~~

~~o General impacts of stormwater flows into surface waters.~~

~~o Impacts from impervious surfaces.~~

- ~~o Source control BMPs and environmental stewardship, actions and opportunities in the areas of pet waste, vehicle maintenance, landscaping and buffers.~~

~~(2) General public and businesses, including home-based and mobile businesses~~

- ~~o BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.~~

- ~~o Impacts of illicit discharges and how to report them.~~

~~(3) Homeowners, landscapers and property managers~~

- ~~o Yard care techniques protective of water quality.~~
- ~~o BMPs for use and storage of pesticides and fertilizers.~~
- ~~o BMPs for carpet cleaning and auto repair and maintenance.~~
- ~~o Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees.~~
- ~~o Stormwater treatment and flow control BMPs.~~

~~(4) Engineers, contractors, developers, review staff and land use planners~~

- ~~o Technical standards for stormwater site and erosion control plans.~~
- ~~o Low Impact Development techniques, including site design, pervious paving, retention of forests and mature trees.~~
- ~~o Stormwater treatment and flow control BMPs.~~

ii. Each Permittee shall implement or participate in an effort to measure ~~understanding and~~ adoption of the targeted behaviors by the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively as well as to evaluate changes in adoption of the targeted behaviors.

- iii. Each Permittee shall track and maintain records of public education activities.

Justification: The current language states, “The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts,” yet requires that the program address audiences that do not necessarily engage in such behaviors and practices. It also requires the program to target a list of audiences and issues that seems somewhat arbitrary and does not allow application of resources based on a prioritization of the pollution sources and behaviors that produce them.

The current language requires the program “shall be designed to achieve measurable improvements in each target audience’s understanding of the problem and what they can do to solve it.” In many cases, however, the most effective way to achieve behavior change is not through increased understanding of the problem, but by addressing the audience’s barriers and motivators to performing the desired behavior. The literature is clear that increased awareness and understanding does not necessarily produce the desired behavior change. If the goal is to achieve behavior change, then we should measure behavior change and not understanding.

The current language also requires that the program, “target the audiences and topics listed below...,” including “the general public” and “the general public and businesses”. Targeting the general public does not constitute any audience targeting at all, is self contradictory, and is at odds with the behavior change goals of the section. Likewise, it requires targeting “general impacts of stormwater flows into surface waters”. Again, targeting general impacts is not targeting at all, and is at odds with the behavior change goals.

The suggested language would resolve these issues and would require programs that address a prioritized set of behaviors, and the audiences that engage in those behaviors, based on their water quality impacts. The standards for measuring and evaluation are more focused, but still measure adoption of desired behaviors. The proposed language allows for more strategic selection of targeted behaviors, appropriate to each local jurisdiction, using local or regional water quality based prioritization schemes. Ultimately it allows for more strategic, targeted application of public resources where they will produce the greatest results.

The following pages contain schedules that illustrate the BPCP deadlines as currently written by Ecology, and as proposed by Snohomish County.

Proposed Modifications to NPDES Phase 1 Municipal Stormwater Permit
Snohomish County Comments
April 30, 2009

Phase 1 modified permit - March 18, 2009

	2007				2008				2009				2010				2011			
Requirement	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
A2 - TMDL Requirements - Early Action Approach																				
Prepare Early Action BMP plan	xxx	xxxxxx	xxx	2/16/08	xxxX															
Public review of Early Action Plan	xxx	xxxxx	xxx	xxxxxxx	5/16/08	xxxX														
Begin implementation of Early Action Plan	xxx	xxxxx	xxx	xxxxxxx	xxxxxxx	8/16/08	xxx													
Submit sampling QAPP to Ecology	xxx	xxxxx	xxxx	xxxxxxx	xxxxxxx	xxxxxx	xxxx	xxxx	xxxx	xxxx	7/16/09									
Monitoring pursuant to QAPP to begin													1/17/10							
Develop Bacterial Pollution Control Plan (no legal start date)													xxxx	xxxx	xxxx	xxxxxx	xxx	5/16/11		
Public review of BPCP (no legal start date)													xxxx	xxxx	xxxx	10/9/10				
Submit BPCP to Ecology																10/9/10				

Proposed Modifications to NPDES Phase 1 Municipal Stormwater Permit
 Snohomish County Comments
 April 30, 2009

Deadlines Proposed by Snohomish County

	2007				2008				2009				2010				2011			
Requirement	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
A2 - TMDL Requirements - Early Action Approach																				
Prepare Early Action BMP plan	xxxxx	xxxxx	xxxxx	2/16/08	xxxX															
Public review of Early Action Plan	xxxxx	xxxxx	xxxxx	xxxxxx	5/16/08	xxxX														
Begin implementation of Early Action Plan	xxxxx	xxxxx	xxxxx	xxxxxx	xxxxxx	8/16/08	xxxX													
Submit sampling QAPP to Ecology	xxxxx	xxxxx	xxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxx	xxxx	7/16/09									
Monitoring pursuant to QAPP to begin													1/17/10							
Develop Bacterial Pollution Control Plan (no legal start date)													xxxxxx	xxxxx	xxxxx	xxxxx	3/31/11			
Public review of BPCP (would add legal start date to permit)													xxxxxx	xxxxx	xxxxxx	xxxxxx	3/31/11			
Submit BPCP to Ecology																	3/31/11			